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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,703	11/30/2001	John G. N. Henderson	(DMSL)HA-86(HAL-ID 167)	9576
26479	7590	12/22/2004	EXAMINER	
STRAUB & POKOTYLO 620 TINTON AVENUE BLDG. B, 2ND FLOOR TINTON FALLS, NJ 07724			PHAN, DAO LINDA	
			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/020,703	Applicant(s) HENDERSON ET AL.	
	Examiner Dao L. Phan	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 42-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

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1. Election/Restriction requirement filed on 11/2/04 has been entered in this application.
2. Claims 12-24, 29-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 12, line 3, and claim 21, line 3, "a received broadcast signal processing circuit and for generating" is unclear.

As to claim 29, lines 3-4, "a plurality of signal components...including antenna polarization information" is indefinite because this is read as a single means claim.

Claim 13-20, 22-24, 30-34 depend from indefinite antecedent claims.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams (Pat. No. 3,842,417) or Tang et al (Pat. No. 4,045,800) or Harbin et al (Pat. No. 5,701,583).

Williams teaches an antenna apparatus including a digital communications channel for receiving (fig. 1), control circuitry 28, coupled to the digital communications

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channel, the control circuitry including a direction control device for generating, a controllable antenna element assembly having a steerable antenna pattern (fig. 3, and 9).

Tang et al teach an antenna apparatus including a digital communications channel for receiving (fig. 1), control circuitry 44, coupled to the digital communications channel, the control circuitry including a direction control device for generating, a controllable antenna element assembly having a steerable antenna pattern (fig. 2, and 8).

Harbin et al teach an antenna apparatus including a digital communications channel for receiving 28, control circuitry 34, coupled to the digital communications channel, the control circuitry including a direction control device for generating, a controllable antenna element assembly having a steerable antenna pattern (65; fig. 6).

5. Claims 12-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Henderson (Pat. No. 4,349,840) or Ma et al (Pat. No. 4,801,940).

Henderson teaches a receiver apparatus including a tuner 24 for receiving a broadcast signal, a received broadcast signal processing circuit 48 for generating at least one signal measurement value, an antenna controller 82 for generating a digital antenna control signal, and a communications channel (fig. 1) for outputting the digital antenna control signal.

Ma et al teach a receiver apparatus including a tuner 12 for receiving a broadcast signal, a received broadcast signal processing circuit 14 for generating at least one signal measurement value, an antenna controller 214 for generating a digital antenna

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control signal, and a communications channel (fig. 1) for outputting the digital antenna control signal.

6. Claims 12-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ikeda et al (US 2001/0055948).

Ikeda et al teach a receiver apparatus including a tuner 2 for receiving a broadcast signal, a received broadcast signal processing circuit 5 for generating at least one signal measurement value, an antenna controller (fig. 1, Control Portion) for generating a digital antenna control signal, and a communications channel (fig. 1) for outputting the digital antenna control signal.

7. Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Verma et al (Pat. No. 4,906,506).

Verma et al teach a receiver apparatus including a tuner (col 2, lines 19-24) for receiving a broadcast signal, a received broadcast signal processing circuit (fig. 2) for generating at least one signal measurement value, an antenna controller (15; col 1 lines 41-51; col 2, lines 24-31) coupled to the broadcast signal processing circuit for generating a digital antenna control signals, and a communications channel (fig. 2) for outputting the digital antenna control signal.

8. Claims 29-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Abramov et al (Pat. No. 6,486,832).

Abramov et al teach a multi-bit antenna control signal and a method of controlling an antenna including generating (32; fig. 4) at least one digital control signal, and transmitting (col 1, lines 60+) the digital control signal to an antenna.

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9. Claims 25-28 are allowed.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao L. Phan whose telephone number is (703)306-4167. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarcza Thomas can be reached on (703)306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DAO PHAN  
PATENT EXAMINER